

IN THE CLAIMS

Please cancel claims 1-9, 11, 13-22, 24, 26-27 and 29-30, and add new claims 31-45. Claims 10, 12, 23, 25, and 28 were previously canceled. All pending claims and their present status are produced below.

1-30. (Canceled)

31. (New) A method for calculating application verb response times, comprising:
receiving a data packet containing application-layer data related to a network application;
identifying a portion of an application verb in the data packet, the application verb being
a specific application-layer transaction within the application;
updating a state machine based on the portion of the application verb, the state machine
comprising a current state of the application;
determining whether the portion of the application verb represents a completed response
of the application verb based on the updated state machine, a completed response
being a response of the application verb with no further response of the
application verb being expected; and
responsive to determining that the portion of the application verb represents a completed
response of the application verb, calculating a response time associated with the
application verb between a request of the application verb and the completed
response of the application verb.
32. (New) The method of claim 31, wherein determining whether the portion of the
application verb represents a completed response of the application verb based on the
updated state machine further comprises checking for retransmissions, out-of-
sequence packets, errors, and complications.
33. (New) The method of claim 31, further comprising identifying a protocol identifier
associated with the application and determining a number of known application verbs
associated with the protocol identifier.

34. (New) The method of claim 33, further comprising allocating memory for a data structure based on the number of known application verbs associated with the protocol identifier.
35. (New) The method of claim 31, wherein a current node of the state machine and a last seen application verb are stored as a bit vector.
36. (New) The method of claim 31, wherein the calculated response time associated with the application verb is mapped to a RMON tree.
37. (New) The method of claim 31, wherein calculating a response time associated with the application verb is performed in real-time.
38. (New) A computer-readable medium having a computer program product for calculating application verb response times, comprising:
computer code for receiving a data packet containing application-layer data related to a network application;
computer code for identifying a portion of an application verb in the data packet, the application verb being a specific application-layer transaction within the application;
computer code for updating a state machine based on the portion of the application verb, the state machine comprising a current state of the application;
computer code for determining whether the portion of the application verb represents a completed response of the application verb based on the updated state machine, a completed response being a response of the application verb with no further response of the application verb being expected; and
computer code for, responsive to determining that the portion of the application verb represents a completed response of the application verb, calculating a response time associated with the application verb between a request of the application verb and the completed response of the application verb.
39. (New) The computer-readable medium of claim 38, wherein computer code for determining whether the portion of the application verb represents a completed

- response of the application verb based on the updated state machine further comprises computer code for checking for retransmissions, out-of-sequence packets, errors, and complications.
40. (New) The computer-readable medium of claim 38, wherein the computer program product further comprises computer code for identifying a protocol identifier associated with the application and computer code for determining a number of known application verbs associated with the protocol identifier.
41. (New) The computer-readable medium of claim 40, wherein the computer program product further comprises computer code for allocating memory for a data structure based on the number of known application verbs associated with the protocol identifier.
42. (New) The computer-readable medium of claim 38, wherein a current node of the state machine and a last seen application verb are stored as a bit vector.
43. (New) The computer-readable medium of claim 38, wherein the calculated response time associated with the application verb is mapped to a RMON tree.
44. (New) The computer-readable medium of claim 38, wherein calculating a response time associated with the application verb is performed in real-time.
45. (New) A system for calculating application verb response times, comprising:
means for receiving a data packet containing application-layer data related to a network application;
means for identifying a portion of an application verb in the data packet, the application verb being a specific application-layer transaction within the application;
means for updating a state machine based on the portion of the application verb, the state machine comprising a current state of the application;
means for determining whether the portion of the application verb represents a completed response of the application verb based on the updated state machine, a completed

response being a response of the application verb with no further response of the application verb being expected;

means for, responsive to determining that the portion of the application verb represents a completed response of the application verb, calculating a response time associated with the application verb between a request of the application verb and the completed response of the application verb.